For more than 11 years, the American Psychiatric Association (APA) has been laboring to revise the current version of its best-selling guidebook, the Diagnostic and Statistical Manual of Mental Disorders (DSM) (see "Psychiatry's Bible Gets an Overhaul" in Scientific American MIND). Although the DSM is often called the bible of psychiatry, it is not sacred scripture to all clinicians—many regard it more as a helpful corollary to their own expertise. Still, insurance companies in the U.S. often require an official DSM diagnosis before they help cover the costs of medication or therapy, and researchers find it easier to get funding if they are studying a disorder officially recognized by the manual. This past December the APA announced that it has completed the lengthy revision process and will publish the new edition—the DSM-5—in May 2013, after some last (presumably minor) rounds of editing and proofreading. Below are the APA's final decisions about some of the most controversial new disorders as well as hotly debated changes to existing ones, including a few surprises not anticipated by close observers of the revision process:

**Hoarding is now an official disorder**

Hoarding is the excessive accumulation of stuff—often stuff that most people would throw out or give away, such as junk mail, unworn clothes, old newspapers and broken tchotchkes. Some people hoard animals or obsessively collect a particular item, such as fabric. Many hoarders store their collections in their homes, but some use their cars or offices instead. Although the stuff piles up, commandeering all living spaces save for narrow "goat trails," hoarders refuse to get rid of anything. In some cases, hoarders simply do not recognize all the chaos and clutter as a problem. In past editions, the DSM regarded hoarding as a symptom of obsessive-compulsive disorder (OCD). Now, in a move well supported by a variety of research, the DSM-5 makes hoarding a disorder in its own right.

Studies published in the last 10 years have emphasized that many hoarders do not have any other symptoms of OCD and that hoarding may be more common than OCD in the general population. Investigations have also suggested that although OCD and hoarding can co-occur, they are genetically and neurologically distinct. Parents and siblings of hoarders show higher rates of hoarding than do first-degree relatives of people with OCD, for instance, and hoarding seems to be inherited as a recessive trait, whereas the compulsive checking and organizing that characterizes OCD is dominant. Further, although some antidepressants, such selective serotonin reuptake inhibitors (SSRIs), and cognitive behavioral therapy often help OCD, their success is much more mixed in changing hoarding behaviors.

Neuroimaging studies support the new diagnosis as well. They have revealed that when hoarders make decisions about what to keep and what to throw out, their brain activity is markedly different from that of people with OCD and people without a mental disorder. In such situations, hoarders take far longer to make up their minds and show more activity in the anterior cingulate cortex, a brain region...
that is important for decision-making, as well as higher activity in the insula, an area of the brain that helps us interpret our emotions and physiological responses. Hoarders, it seems, form strong emotional attachments to objects that most people would not hesitate to chuck out.

Renaming addiction and introducing gambling disorder

The DSM has long avoided the word “addiction.” Instead, the DSM-IV—the current edition and predecessor of the new manual—discusses substance abuse and substance dependence. According to the fourth edition, substance abuse refers to repeated drug use that creates problems at work or school and in one’s social life—binge drinking in college, for example. In contrast, the DSM-IV’s definition of substance dependence is what the phrase “drug addiction” brings to most people’s minds: an inordinate amount of time spent acquiring a drug, increased tolerance, recurrent physical or psychological harm as a result of drug use, failed attempts to stop taking the drug and symptoms of withdrawal.

Charles O’Brien of the University of Pennsylvania and Nora Volkow, director of the National Institute on Drug Abuse (NIDA), have previously written that the APA committee responsible for revising the DSM-III in the 1980s favored the term “dependence” over “addiction” by a single vote. Since then, they and other psychiatrists have argued that the DSM conflates addiction and dependence. In general, clinicians (including the American Society of Addiction Medicine) define addiction not as chemical dependence but as repeatedly seeking and using a drug despite all its obvious repercussions. People who take antidepressants, pain medications or drugs to keep their blood pressure in check all depend on drugs to function, for example, but they are not addicted. As a result of the DSM’s confutation, wrote O’Brien and Volkow, “clinicians who see evidence of tolerance and withdrawal symptoms assume that this means addiction, and patients requiring additional pain medication are made to suffer. Similarly, pain patients in need of opiate medications may forgo proper treatment because of the fear of dependence, which is self-limiting by equating it with addiction.”

Now, the APA has made a gesture toward fixing what many critics contend was a poor choice. The DSM-5 abolishes the confusing terms substance abuse and substance dependence. All addictions and related problems will fall under the single category of “substance use disorders” in a chapter titled “Substance Related and Addictive Disorders.” The DSM-5 also tightens criteria for these disorders and grades them as mild, moderate or severe. Whereas a diagnosis of substance abuse required only one symptom in the DSM-IV, a diagnosis of the newly defined mild substance use disorder requires at least two symptoms.

Although the APA originally proposed including a new chapter titled “Behavioral Addictions,” no such chapter will appear in the new edition according to Darrel Regier, vice chair of the DSM-5 Task Force. For the first time, however, the new manual will include gambling disorder in the same chapter as substance use disorders; previous editions of the DSM classified “pathological gambling” as an impulse control disorder. Whether one can be addicted to a behavior like gambling the same way one can be addicted to a drug remains highly controversial. The APA based its decision in part on recent evidence that the brains of people who are addicted to gambling change in similar ways to the brains of drug addicts and that both drug addicts and pathological gamblers benefit from group therapy and gradual weaning. Another behavioral addiction, Internet use gaming disorder, will appear in section 3, which is reserved for conditions that require further research before they are considered formal disorders. The proposed hypersexual disorder, which many people viewed as another name for sex addiction, was rejected from the new manual entirely.

Mistaking tantrums for a mental illness?

Unusually intense and frequent fluctuations in mood—swinging from an energetic, even agitated, state to serious depression—characterize bipolar disorder (previously known as manic-depressive disorder). For most of the DSM’s existence, bipolar disorder was considered primarily an illness of adulthood, although it sometimes began in adolescence. In the last two decades, however, more and more children have been diagnosed as bipolar. Since about 2000 pediatric diagnoses have increased at least fourfold in the U.S.

This new trend outraged a large segment of the psychiatric community. Most of the so-called bipolar kids—some of whom subsequently took mood stabilizers and antipsychotics with serious side effects—did not have a form of bipolar disorder, many psychiatrists argued. They probably had a different illness altogether. Instead of vacillating between mania and depression, they were irritable most of the time and often erupted in fits of rage and physical violence incommensurate to whatever supposed offense set them off. So the APA decided to create a brand new diagnosis to accommodate these misunderstood children: disruptive mood dysregulation disorder. To meet the criteria, a child between six and 18 must "exhibit persistent irritability and frequent episodes of behavior outbursts three or more times a week for more than a year."
Critics such as Stuart Kaplan of the Penn State College of Medicine, clinical social worker and pharmacist Joe Wegmann, and Allen Frances, professor emeritus at Duke University and chairman of the DSM-IV Task Force, worry that psychiatrists will confuse temper tantrums for a mental disorder and thus continue what they see as a trend of overdiagnosis and overmedication. David Axelson of the University of Pittsburgh put the DSM-5 disruptive mood dysregulation criteria to the test using several years’ worth of data collected from 706 children and concluded that the new disorder was not very useful. First, it confusingly overlapped with—and was often difficult to distinguish from—two established diagnoses: oppositional defiant disorder and conduct disorder. Furthermore, a diagnosis of disruptive mood dysregulation in childhood was not a good predictor of future mental health issues, specifically depression and anxiety. Many observers hoped that this research, published in late 2012, would change the APA’s mind, but the committee decided to keep disruptive mood dysregulation disorder in the DSM-5.

The personality disorders chapter remains disordered
For decades psychiatrists within and without the APA have called for a complete overhaul of the way clinicians describe and diagnose personality disorders because of obvious flaws. For one thing, many criteria for the 10 personality disorders listed in the DSM overlapped, resulting in so many patients with multiple diagnoses that the validity of certain disorders came into question: Did some of these disorders simply not exist outside the pages of the DSM? Histrionic and narcissistic personality disorders, for example, are both characterized by a need to be the center of attention, a willingness to take advantage of families and friends, and difficulty reading other people’s emotions. Additionally, psychiatrists began to rely too heavily on “Personality Disorder—Not Otherwise Specified,” suggesting that some patients had personality problems that were not adequately defined by the DSM in the first place.

More fundamentally, clinical psychologists have increasingly come to realize that people do not categorically have or not have certain problematic personality traits—rather, these characteristics vary in strength from person to person. Therefore, instead of making a diagnosis by looking for the presence or absence of maladaptive personality traits, clinicians should measure the severity of such traits to help determine, in the context of a patient’s overall mental health, whether and how the person should be treated.

Although the members of the DSM-5 work group tasked with redefining personality disorders did not agree about everything—and two members, Roel Verheul and John Livesley, resigned in frustration—the team drafted a relatively well-received proposal for serious revisions. The proposal eliminated four redundant disorders and, overall, adopted a much more nuanced view of personality than espoused by earlier versions of the DSM, encouraging thorough interviews to assess how well an individual maintains a coherent sense of self and how he or she interacts with others, rather than trying to slot someone into one of 10 categories based on a few supposedly telltale symptoms.

Some psychiatrists, however, lambasted the proposed revisions as far too complex and burdensome, arguing that no clinician would ever use the new system. The work group continually revised the proposal, simplifying it as much as possible, and won approval from the DSM-5 Task Force. But the APA Board of Trustees ultimately voted against the proposed changes, according to Andrew Skodol of the University of Arizona College of Medicine, a member of the Personality Disorders Work Group. As a result, the DSM-5 chapter on personality disorders is more or less the same as the DSM-IV chapter. Skodol is not sure why the Board of Trustees rejected the proposal at the 11th hour, but “there was a lot of behind-the-scenes lobbying to keep things the way they were,” he says. The work group’s proposal has been relegated to a back section of the manual to “encourage further study.”

Recognizing that grief can quickly precipitate depression
Symptoms of depression—such as low mood and energy, insomnia, feelings of worthlessness, loss of pleasure and change in weight—must persist for at least two weeks to meet the DSM-IV criteria for a major depressive episode. The DSM-IV stipulates, however, that someone who has recently lost a loved one should not receive a diagnosis of depression unless the relevant symptoms last longer than two months. The idea is that, in these cases, what looks like major depression is probably bereavement—more commonly known as grief—a typical and transient response to loss that does not require medication. The DSM-5 has eliminated this “bereavement exclusion” and replaced it with a few footnotes describing the differences between grief and depression. Now, someone can be diagnosed with depression, and ask their insurance company to cover the costs of antidepressants, as well as talk therapy or other treatment, in the first two months following the death of a loved one.

Richard Friedman of Weill Cornell Medical College and others have criticized this decision, worrying that it will encourage overdiagnosis and overmedication. According to the APA, however, the change reflects the new understanding that bereavement is a severe stressor that can precipitate a major depressive episode relatively quickly.
Some studies have shown, for instance, that symptoms of depression co-occurring with bereavement are similar to depression unrelated to bereavement in their severity and duration, response to antidepressants and long-term outcomes. Therefore, the reasoning goes, people who are grieving and clinically depressed within two months of a loss should have access to treatment. Similarly, some researchers have questioned why, when it comes to identifying depression, the DSM makes an exception of grief following the death of a loved one, but not of any other kinds of loss or psychosocial stress such as divorce, unemployment, financial failure or romantic rejection. The International Classification of Diseases, published by the World Health Organization, makes no such exceptions.

In an article published in *Depression and Anxiety* in May 2012, Sidney Zisook of the University of California, San Diego, and his co-authors examined the results of several review papers and studies and concluded that the available evidence supports the removal of the bereavement exclusion from DSM-5. "Acknowledging that bereavement can be a severe stressor that may trigger an MDE [major depressive episode] in a vulnerable person does NOT medicalize or pathologize grief" they wrote (emphasis theirs). "Rather, it prevents MDE from being overlooked or ignored and facilitates the possibility of appropriate treatment. Furthermore, removing the BE [bereavement exclusion] does not imply that grief should end in two months. Indeed, for many individuals, grief lasts for months, years or even a lifetime in its various manifestations, whether or not it is accompanied by MDE."

**Embracing the autism spectrum**

Often called a neurodevelopmental disorder, autism is characterized by impaired social interaction and communication—such as delayed language development, avoiding prolonged eye-contact and sometimes difficulty making friends—as well as restricted and repetitive behavior, such as repeated vocal quirks or gestures. In the DSM-IV, autistic disorder, Asperger's and childhood disintegrative disorders, along with pervasive developmental disorders not otherwise specified (PDD-NOS), are distinct diagnoses listed in the same chapter. The DSM-5 combines them all into a single new diagnosis named autism spectrum disorder (ASD). The APA argues that the symptoms of these disorders are so similar that they belong to the same continuum, rather than constituting separate entities. Some people in the Asperger's community maintain that Asperger's is different enough from autistic disorder to merit its own category, worrying that they will lose an important part of their identity; others in the community applaud the change, embracing the idea of a continuum. Some parents have pointed out that the change may in fact help children who have been denied after-school programs or assistance from insurance companies because Asperger's was considered too mild to warrant such support.

The APA has also made it more difficult for someone to get a diagnosis of autism. As *Scientific American* has previously reported, the DSM-IV offered 2,027 different ways to be diagnosed with autism; the DSM-5 provides just 11. That reduction might sound drastic but, overall, many psychiatrists agree that this is a helpful change. They argue that past criteria were too loose: Some people who received a diagnosis probably did not have autism, and this misdiagnosis has surely contributed to skyrocketing rates of autism diagnoses worldwide since the 1980s. The U.S. Centers for Disease Control and Prevention estimates that one in 88 children in the nation is diagnosed with an autism spectrum disorder.

By early 2012, however, several studies had tested the new DSM-5 autism criteria and concluded that they were too strict, excluding some high-functioning people on the milder end of the spectrum. In October 2012 a larger and more comprehensive analysis of data from more than 5,000 children concluded that the DSM-5 autism criteria identified 91 percent of children who received a diagnosis of autism or a related developmental disorder under DSM-IV. A few tweaks suggested by the smaller studies published in early 2012 might have made the DSM-5 criteria even more inclusive and helped to identify the 9 percent of children neglected in the October 2012 study. Yet when it came time to finalize the DSM-5 at the end of 2012, the APA decided to stick with the stricter criteria, as confirmed by Catherine Lord of Weill Cornell Medical College, one of the work group members who helped revise the definitions.

**Attenuated psychosis syndrome was too weak to make the cut**

The APA originally proposed adding a new disorder to the DSM-5 called attenuated psychosis risk syndrome, which was intended to identify children with warning signs that precede full-blown psychosis—signs such as hallucinated voices or images. Critics pointed to research showing that two thirds of children who would meet the proposed criteria never develop serious psychosis (see “At Risk for Psychosis?” by Carrie Arnold; *Scientific American* MIND, September/October 2011). Related research suggests that 11 percent of the general population sometimes hears voices or engages in moments of intense magical thinking without any distress or interference in work and social life. Allen Frances, chair of the DSM-IV Task Force and the most vociferous critic of the new manual, called attenuated psychosis syndrome the "single worst DSM-5 proposal." As with disruptive mood dysregulation disorder, the fear was that children who did not need medication would be given powerful antipsychotics with potentially harmful side effects such as trembling, suppressed immunity and weight gain. The APA acknowledged the criticism and, after disappointing tests of the proposed criteria, moved...
attenuated psychosis risk syndrome out of the *DSM-5*’s main section into section 3, reserved for conditions that require further research before they are considered formal disorders.

Some researchers still argue, however, that attenuated psychosis syndrome is useful and that further research will support its utility. "I think it is the future of therapeutics and our best hope to make a real-life course difference for people vulnerable to developing chronic psychosis,” William Carpenter, director of the Maryland Psychiatric Research Center, wrote in an e-mail. "I would have preferred to place it in the main text now, but appreciate the limitation without proof of good reliability." Patrick McGorry, director of the Orygen Youth Health Research Center in Australia, has similar thoughts. "On balance, I agree with and can certainly accept the decision,” he said in an e-mail. McGorry notes, however, that although only one third of children identified as high risk for psychosis become psychotic, more than 70 percent of the remaining children develop mood, anxiety or substance use disorders, according to data he has presented at conferences and will publish shortly. Both Carpenter and McGorry say that antipsychotics and other drugs are not the only treatment option; alternatives include cognitive behavioral therapy to recognize and diminish maladaptive thought patterns, talk therapy, interventions to reduce substance abuse and simply increased watchfulness for any worsening indicators of psychosis.